

## ORIGINAL ARTICLE

### Research

## Old age comes with defects. Who cares?

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Received: 2.08.2022 • Accepted for publication: 31.08.2022

### Abstract

**Introduction:** Providing access to health care for the whole population is a worldwide accepted principle, especially focusing on vulnerable citizens. It is seen as a right for everyone in OECD countries irrespective of their socio-economic circumstances.

**Objective:** This study questions whether this is the case in 31 European countries for 'senior citizens'.

**Method:** The analysis (using correlations) is based on data from Eurostat and OECD 2019/2020. Health care data include: health care total expenses as % of GDP, health care expenses per capita, available hospital beds per 100.000, available medical doctors per 100.000, number of general practitioners per 100.000, and consultations of medical doctors per capita. Self-reported unmet health care needs are used as indicator for barrier to health care.

**Results:** The data show, that the extent of financing in health care, the percentage of people at risk for poverty and the number of practicing medical doctors are related to the unmet health care needs of citizens. The number citizens in Europe, who report unmet health care needs, - and especially old citizens - is remarkable. In the case of older people, it may be a sign of 'ageism'.

**Conclusions:** Self-reported unmet health care needs are significant frequenter mentioned by citizens, who live in countries, which spent less to health care as percentage of the GDP and have a high percentage of citizens at risk for poverty. And these citizens are 65 years or older.

Keywords: *health care, aging, hospital, medical doctors, poverty, ageism*

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## ARTICOLE ORIGINALE

### Cercetare

## Bătrânețea vine cu defecte. Cui îi pasă?

### Rezumat

**Introducere:** Asigurarea accesului la asistență medicală pentru întreaga populație este un principiu acceptat la nivel mondial, concentrându-se în special asupra cetățenilor vulnerabili. Este văzut ca un drept pentru toată lumea din țările OCDE, indiferent de circumstanțele lor socio-economice.

**Obiectiv:** Acest studiu se întreabă dacă acesta este cazul în 31 de țări europene pentru „cetățeni în vârstă”.

**Metoda:** Analiza (folosind corelații) se bazează pe date de la Eurostat și OCDE din perioada 2019/2020. Datele includ: cheltuielile totale de îngrijire a sănătății ca % din PIB, cheltuielile de îngrijire a sănătății pe cap de locuitor, paturi de spital disponibile la 100.000, medici disponibili la 100.000, numărul de medici generaliști la 100.000 și consultații ale medicilor pe cap de locuitor. Nevoile de îngrijire a sănătății auto-raportate nesatisfăcute sunt utilizate ca indicator pentru bariera în calea îngrijirii sănătății.

**Rezultate:** Datele arată că amploarea finanțării în domeniul sănătății, procentul persoanelor expuse riscului de sărăcie și numărul medicilor în exercițiu sunt legate de nevoile de sănătate nesatisfăcute ale cetățenilor. Numărul cetățenilor din Europa, care raportează nevoi nesatisfăcute de îngrijire a sănătății, și în special cetățenii în vârstă, este remarcabil. În cazul persoanelor în vârstă, poate fi un semn de „ageism”.

**Concluzii:** Nevoile auto-raportate de îngrijire a sănătății nesatisfăcute sunt menționate mai frecvent de cetățenii care locuiesc în țări, care au cheltuit mai puțin pentru îngrijirea sănătății ca procent din PIB și au un procent ridicat de cetățeni expuși riscului de sărăcie. Și acești cetățeni au 65 de ani sau mai mult.

Cuvinte cheie: *îngrijire medicală, îmbătrânire, spital, medici, sărăcie, vârstă*

## Introduction

There are many sayings about old age. A few are positive (wisdom, experience), but most are not. WHO writes: "Common conditions in older age include hearing loss, cataracts and refractive errors, back and neck pain and osteoarthritis, chronic obstructive pulmonary disease, diabetes, depression and dementia. As people age, they are more likely to experience several conditions at the same time." (1) But is not only about health problems; "Digital Equity for All Ages" was the theme Senior Citizen Day 2022 (21 August). Problems in old age are the main tone: physical, cognitive, emotional, social. Robert Butler called it "ageism": a combination of three connected elements: prejudicial attitudes towards older persons, discriminatory practices against older people and institutional practices and policies that perpetuate stereotypes about older people (2).

Research shows, that one-quarter of old European citizens sometimes or frequently experience discrimination because of their age (3). The frequency of ageism varies among European countries. It is relatively high in Bulgaria, Czech Republic, Romania and Slovakia and low in Denmark, Sweden and Switzerland (3). Old-age discrimination is experienced less frequently in countries with social security arrangements. These facts have raised the question: is 'ageism' happening in health care? If so, is it related to the way the health care system is financed or to the health status of the population?

In 2015 Millbank published a report, which showed complaints of older people about health care access/treatment. In OECD countries 2,6% of the *whole* population reported that they had unmet care needs due to cost, distance or waiting times. However differences between countries are considerable (5). For example, 15% of the population in Estonia reported unmet care needs, in Greece 8% and in Spain and Austria it was less than 1%. (5).

Recently, Eurostat data confirmed that especially older citizens' health care needs were not fulfilled because they were too expensive for them (6). These facts raise a question whether a fundamental principle in OECD countries is still the case, i.e. "A fundamental principle underpinning all health systems across OECD countries is to provide access to high-quality care for the whole population, irrespective of their socio-economic circumstances" (5).

This study explores the (possible) answers to this question about the existence of the 'fundamental principle': 'Are factors in health care (financing, personnel, health status) and/or social security related to the unmet health care needs of elderly?'

## Methods

Based on available data from Eurostat and OECD the following variables are included in the analysis to answer the research question. Self-reported unmet health care needs are assessed in 2 ways: self-reported unmet needs of persons of 16 years and older and self-reported unmet needs of persons 65 years and older. The difference between the 2 in outcome may indicate the presence of 'ageism'. Because the reason for unmet health care needs was 'too expensive', also the '% of people at risk for poverty' is added as possible explaining factor. Healthy life expectancy at birth is indicator for the general health status of the population.

The following data are used to characterize the health care system in each EU country: health care total expenses as % of GDP, health care expenses per capita, available hospital beds per 100.000, available medical doctors per 100.000, number of general practitioners per 100.000, and consultations of medical doctors per capita. All data are based on Eurostat (6) and OECD (7) publications.

Pearson's 'r' and Spearman's 'rho' are both used to analyze the statistical significance of the relationship between health care characteristics (explaining variables) and self-reported unmet needs of people of 65 years and older. While Pearson's correlation calculates the linear relationship between 2 continuous variables, evaluates Spearman's Rho the rank-order of the variable.

## Results

Self-reported unmet health care needs for the population of 16 years and older is relatively low in the studied European countries: 1 % report unmet needs for medical examination because it is too expensive, or too far, or there is a long waiting list. For people of 65 years and over it is 3%. The variation between countries is between 0,1% and 17,8%.

Table 1 presents the correlations (Pearson and Spearman) between the 'dependent variables' self-reported unmet needs 16+' and self-reported unmet needs 65+' and the mentioned 'explaining variables'.

The high correlation between the two variables "16+" and "65+" indicates, that 'ageism' is not the only reason for the high percentage of unmet needs in elderly. Also 'not aged' citizens report unmet needs. But the correlation of  $> .80$  for people of 65+ indicates that it are especially elderly, who suffer from lack of access to the health care system in some countries.

High health care expenses in a country are statistically significant correlated with a high number of practicing medical doctors, but with a low number of available hospital beds. High health care expenses also are significant correlated with a low number of self-reported unmet needs, especially among older citizens. Those, who report unmet needs do so because it is too expensive; in countries with high health care expenses these people are able to get medical services. In these countries the number of practicing medical doctors is also statistically significant higher. And a high number of practicing doctors reduces the self-reported unmet needs of older citizens.

Table 1. Correlations (Pearson's r and Spearman's Rho) between self-reported unmet needs, people at risk for poverty, healthy life years and 6 health care related indicators

	A	B	C	D	E	F	G	H	I	G
<b>Pearson's r</b>										
<b>Spearman's Rho</b>										
Self-reported unmet needs 16+ (A)	1.000	.939**	.462**	-.073	-.355*	-.350*	.150	-.258	-.142	-.201
Self-reported unmet needs 65+ (B)	.815**	1.000	.548**	-.024	-.447**	-.406*	.150	-.216	-.207	-.227
% people at risk for poverty (C)	.309	.457**	1.000	-.162	-.304	-.416*	.245	-.020	-.094	-.228
Healthy life years at birth (D)	-.126	-.129	-.131	1.000	-.079	-.135	-.123	-.022	.099	.192
Health care expenses as % GDP (E)	-.355*	-.593**	-.353	-.054	1.000	.614**	-.283	.275	-.134	.068
Health care expenses per capita (F)	-.374*	-.595**	-.397*	-.152	.667**	1.000	-.305	.391*	.221	-.071
Available hospital beds per 100000 (G)	.176	.325	-.176	-.174	-.361**	-.355*	1.000	-.005	-.264	.530**
Practising medical doctors per 100000 (H)	-.343	-.389*	.023	.027	.241	.365*	-.036	1.000	.068	-.115
Number of general practitioners per 100,000 (I)	-.202	-.291	.070	.117	.227	.468**	-.299	.174	1.000	-.165
Consultation frequency medical doctors per capita (G)	.015	.067	-.189	.212	.084	-.144	.600**	-.077	-.197	1.000

The following factors play an essential role to understand the why citizens do or don't complain about unmet needs (because it is too expensive): health care expenses as part of the national Gross Domestic Product (GDP) and health care expenses per citizen. In countries, where the health care expenses as part of GDP are low as well as the health care expenses per citizen, a significant number of citizens (16+) report unmet needs, while the number of older citizens is even higher. A relatively low percentage of GDP is spent to health care in Cyprus, Greece, Hungary and Latvia. Relatively a high percentage of GDP is spent in health care in Germany, Ireland, Sweden and United Kingdom.

A second major factor, related to the number of self-reported unmet health care needs, is the percentage at risk for poverty: in countries, with a high risk for poverty, a relative high number of citizens (especially older citizens) report unmet health care needs. These countries include Bulgaria, Cyprus, Greece and Romania.

Healthy life expectancy at birth - as indicator of the health status of a population - does not play a significant role to explain unmet health care needs.

Health care indicators - like number of hospital beds or number of general practitioners - are not directly related to unmet health care needs. One type of health care facility is statistically significant related to unmet needs of elderly, i.e. a high number of practicing doctors is associated with low self-reported unmet needs in elderly (Spearman's Rho).

A high number of practicing medical doctors is also related to high health care expenses per capita.

## Discussion

A general acceptance principle in Europe and worldwide in OECD countries is, that health care systems provide access to high quality care for the whole population, irrespective of their socio-economic circumstances. It is described as a 'fundamental principle'. Our analysis indicates, that in health care various factors (financing, personnel, health status) are related to the unmet health care needs of - especially - older citizens. The number of citizens in Europe, who complain about unmet health care needs, - and especially old citizens - is remarkable. This finding is - unfortunately - in line with an OECD report (6), which underlines this is not only a 'European problem'. And in the case of older people, it may be a sign of 'ageism', at least in Europe, but given the OECD data probably worldwide.

Money to finance health care may directly or indirectly influence the availability of health care facilities like number of GPs or hospital beds. Financing health care - even if it is a large part of the GDP of a country - is helpful, but it is not enough. Also the providers (hospitals boards, medical doctors) are at stake. Hospital beds do not cure patients, devoted nurses and doctors may do as do clean hospital beds. These 'basic rules' of good health care are apparently not the standard in all European countries. And the citizens, who suffer most, are (not surprisingly) the most vulnerable ones (among these are elderly the majority).

It is well known that people at risk for poverty have a special risk for morbidity and a higher risk for mortality. Many of these people live in European countries, which also invest less in health care, which may support these 'people at risk'. In these countries especially older citizens have to report unmet health care needs. It is ageism. Who cares?

**Conflict of interest:** none/**Conflict de interese:** nu există

## References/Bibliografie

1. WHO. *Ageing and health*. Available from: <https://www.who.int/news-room/fact-sheets/detail/ageing-and-health> [Accessed 25th July 2022].
2. Butler RN. *Ageism: a foreword*. J Soc Issues 1980;36:8-10.
3. Heuvel WJA van den, Santvoort MM van. *Experienced discrimination amongst European old citizens*. European Journal of Ageing 2011;8(4), 291-299.
4. Parliamentary and Health Service Ombudsman. *Breaking down the barriers. Older people and complaints about health care*. London: Millbank Publication; 2015.
5. OECD. *Health at a Glance*. Available from: <https://www.oecd.org/health/health-at-a-glance/> [Accessed 27th July 2022].
6. OECD. *Unmet needs for health care | Health at a Glance 2021*. Available from: [https://www.oecd-ilibrary.org/social-issues-migration-health/health-at-a-glance-2021\\_13aff239-en](https://www.oecd-ilibrary.org/social-issues-migration-health/health-at-a-glance-2021_13aff239-en) [Accessed 27th July 2022].
7. OECD. *OECDiLibrary*. Available from: <https://www.oecd-ilibrary.org/> [Accessed 27th July 2022] Rockwood K, Fox RA, Stolee P. Frailty in elderly people: an evolving concept. *Can Med Assoc J*. 1994;150:489-495.